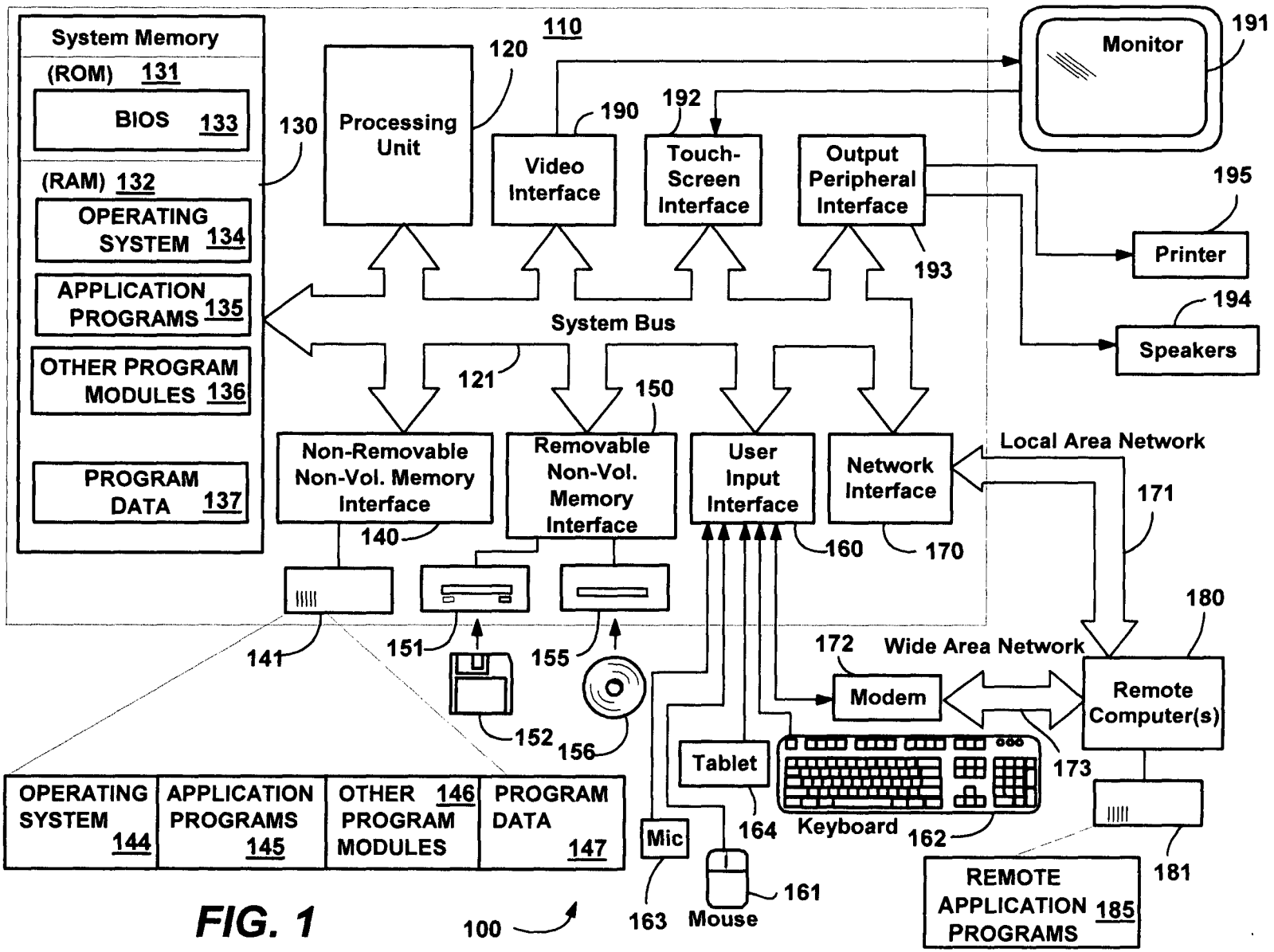
System Memory
(ROM) 131
BIOS 133
(RAM) 132
OPERATING SYSTEM 134
APPLICATION PROGRAMS 135
OTHER PROGRAM MODULES 136
PROGRAM DATA 137
130
Processing Unit
120
110
Video Interface
190
Touch-Screen Interface
192
Output Peripheral Interface
193
Monitor
191
Printer
195
Speakers
194
System Bus
121
Non-Removable Non-Vol. Memory Interface
140
Removable Non-Vol. Memory Interface
150
User Input Interface
160
Network Interface
170
Local Area Network
171
Wide Area Network
172
Modem
Remote Computer(s)
180
173
Keyboard
162
Tablet
164
Mic
163
Mouse
161
REMOTE APPLICATION PROGRAMS 185
181
141
151
155
152
156
OPERATING SYSTEM 144
APPLICATION PROGRAMS 145
OTHER PROGRAM MODULES 146
PROGRAM DATA 147
100

FIG. 1

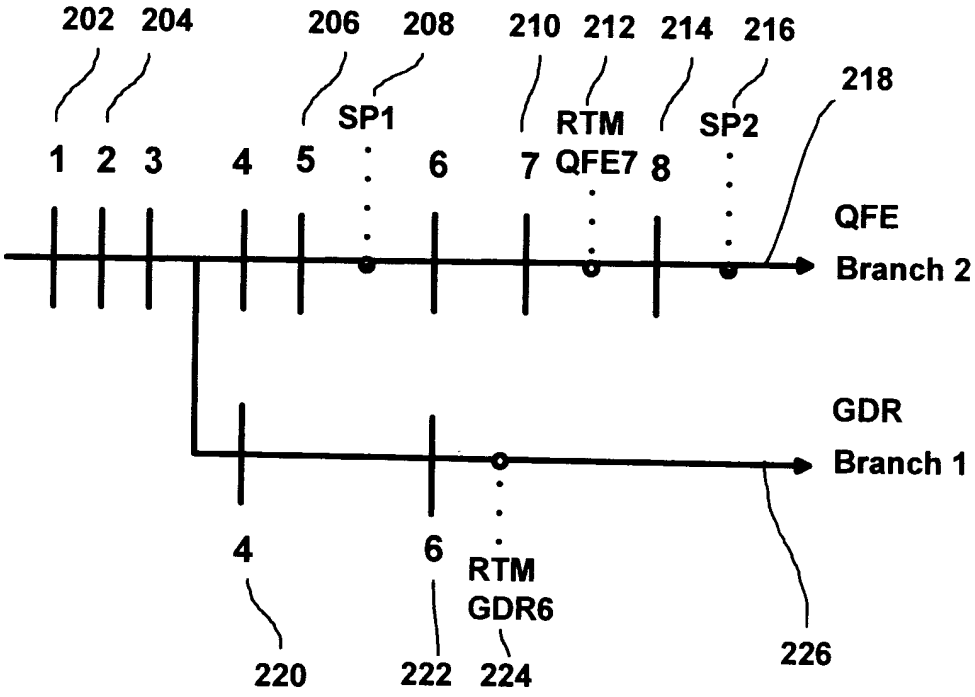
202
204
206
208
210
212
214
216
218
SP1
RTM
QFE7
SP2
1
2
3
4
5
6
7
8
QFE
Branch 2
GDR
Branch 1
4
6
RTM
GDR6
220
222
224
226

FIG. 2

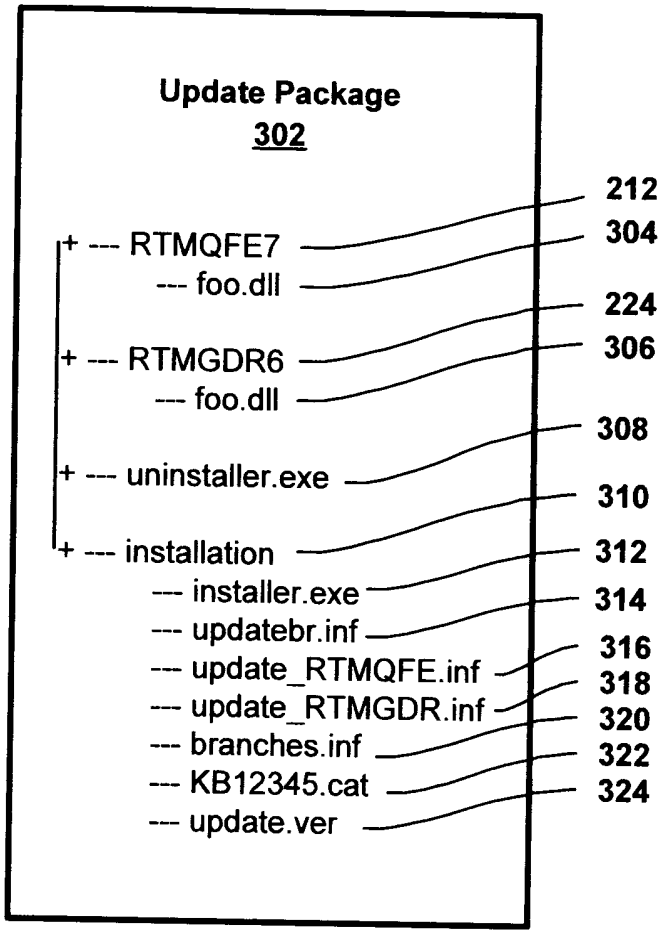
Update Package
302
+ --- RTMQFE7
--- foo.dll
+ --- RTMGDR6
--- foo.dll
+ --- uninstaller.exe
+ --- installation
--- installer.exe
--- updatebr.inf
--- update_RTMQFE.inf
--- update_RTMGDR.inf
--- branches.inf
--- KB12345.cat
--- update.ver
212
304
224
306
308
310
312
314
316
318
320
322
324

FIG. 3

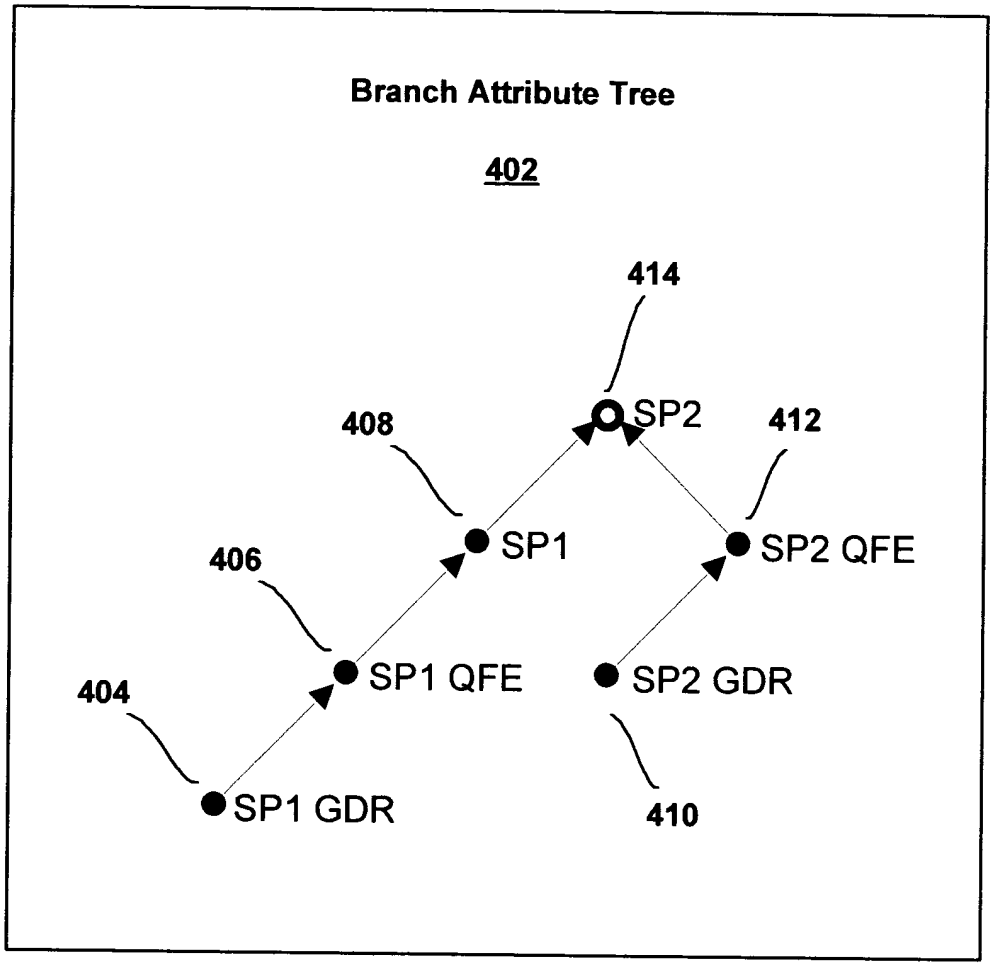
Branch Attribute Tree
402
414
SP2
408
412
SP1
SP2 QFE
406
SP1 QFE
SP2 GDR
404
SP1 GDR
410

FIG. 4

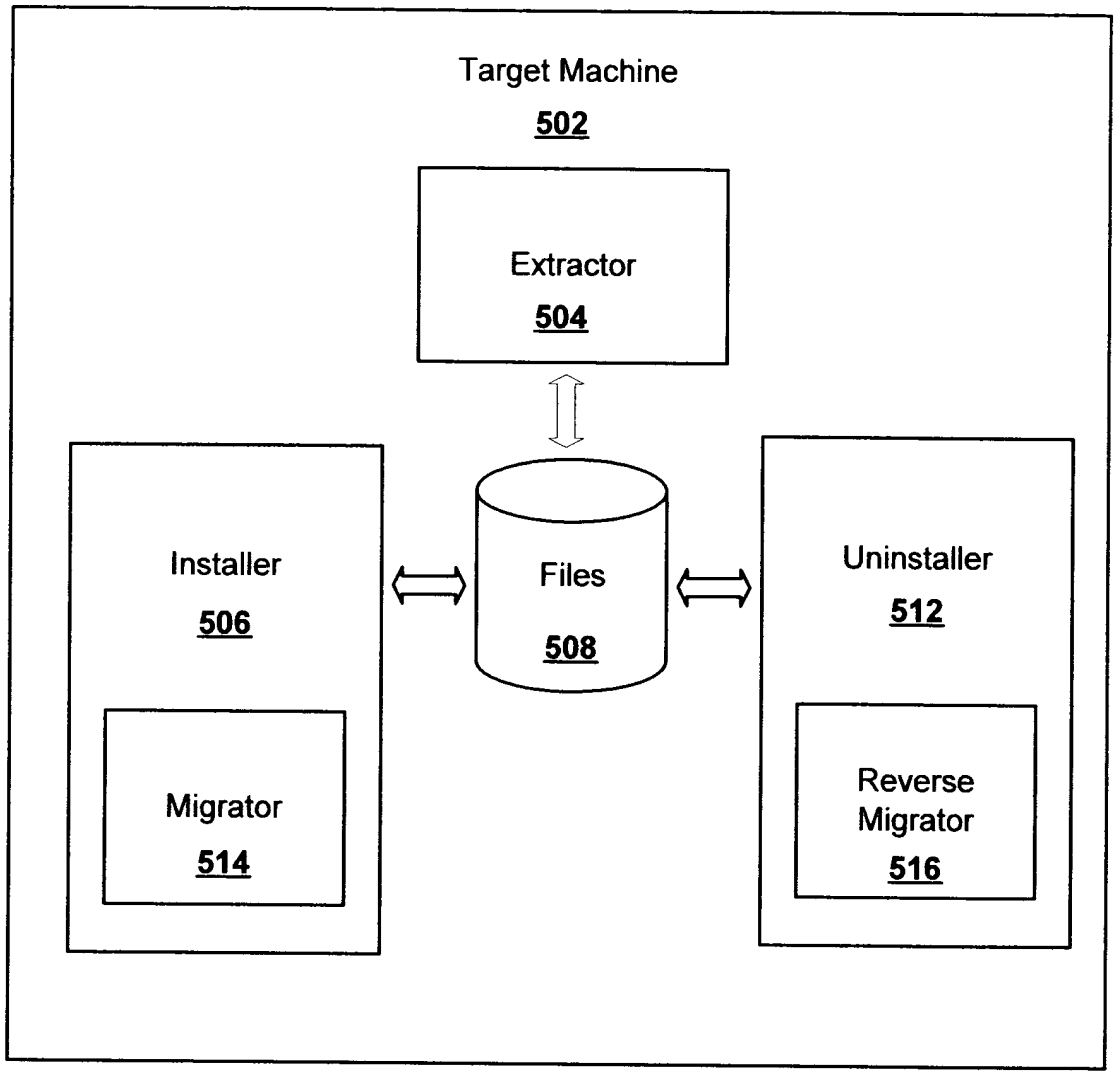
Target Machine
502
Extractor
504
Installer
506
Migrator
514
Files
508
Uninstaller
512
Reverse
Migrator
516

FIG. 5

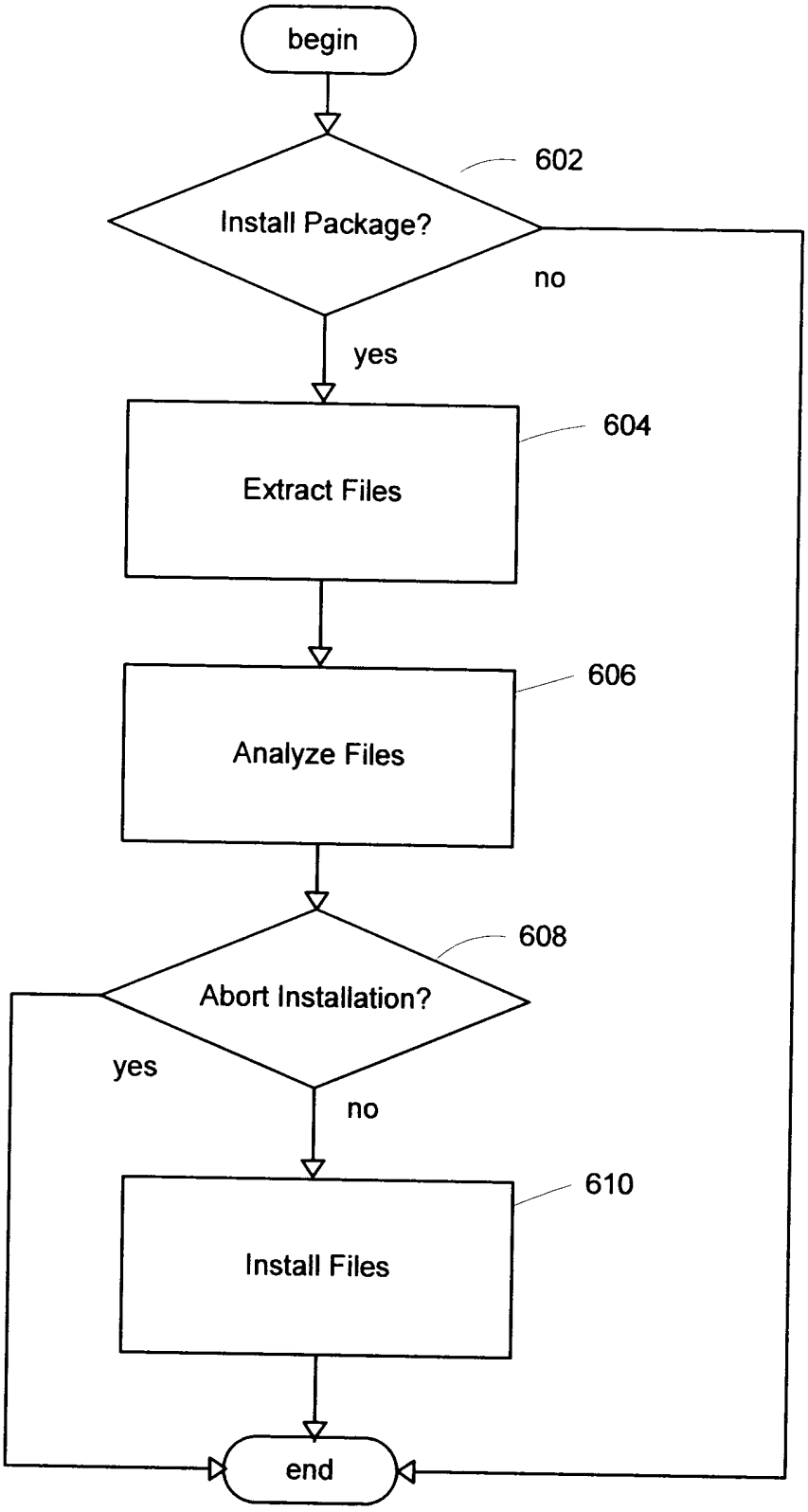
begin
602
Install Package?
no
yes
604
Extract Files
606
Analyze Files
608
Abort Installation?
yes
no
610
Install Files
end

FIG. 6

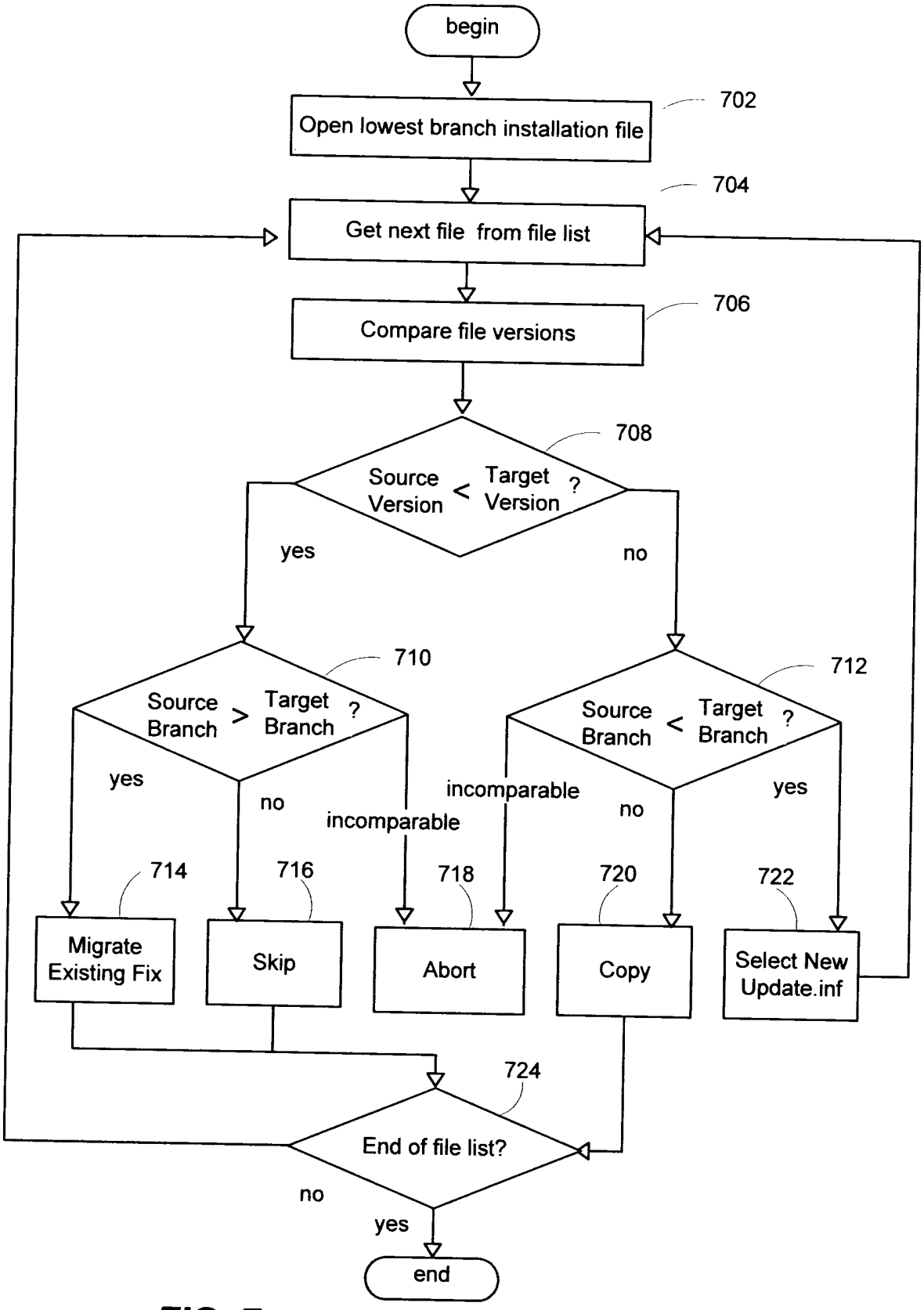
begin
Open lowest branch installation file
702
Get next file from file list
704
Compare file versions
706
Source Version < Target Version ?
708
yes
no
Source Branch > Target Branch ?
710
Source Branch < Target Branch ?
712
yes
no
incomparable
incomparable
no
yes
714
716
718
720
722
Migrate Existing Fix
Skip
Abort
Copy
Select New Update.inf
End of file list?
724
no
yes
end

FIG. 7

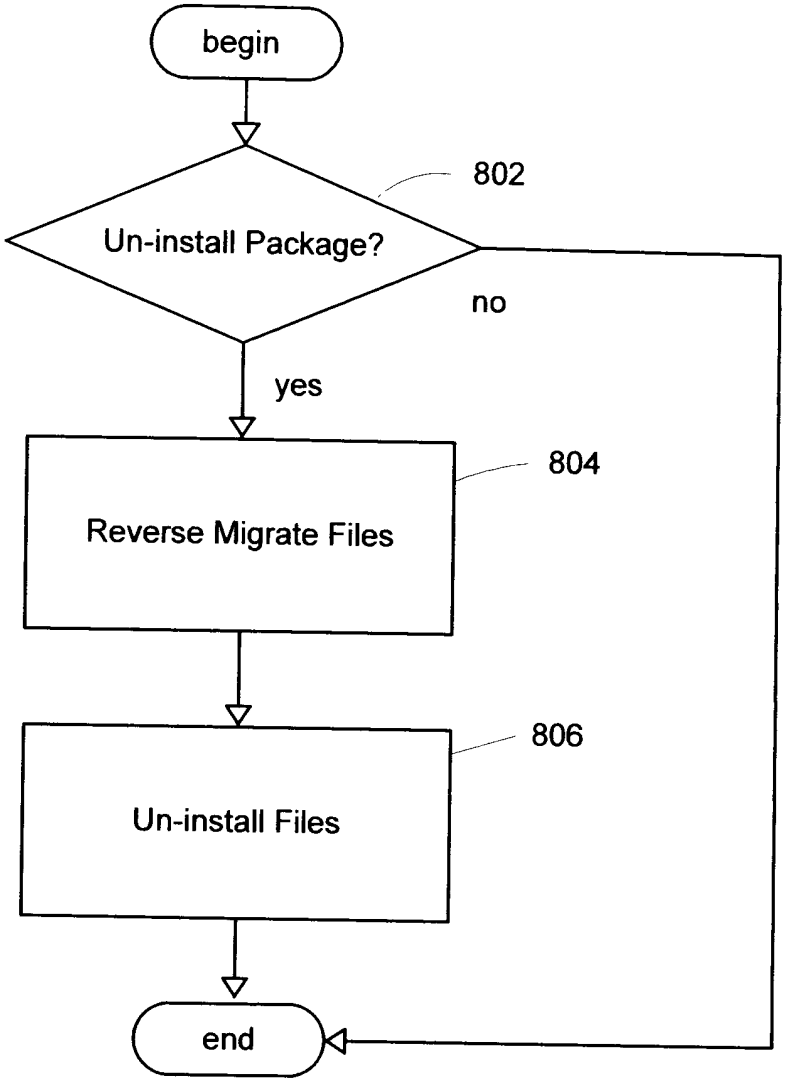
begin
802
Un-install Package?
no
yes
804
Reverse Migrate Files
806
Un-install Files
end

FIG. 8

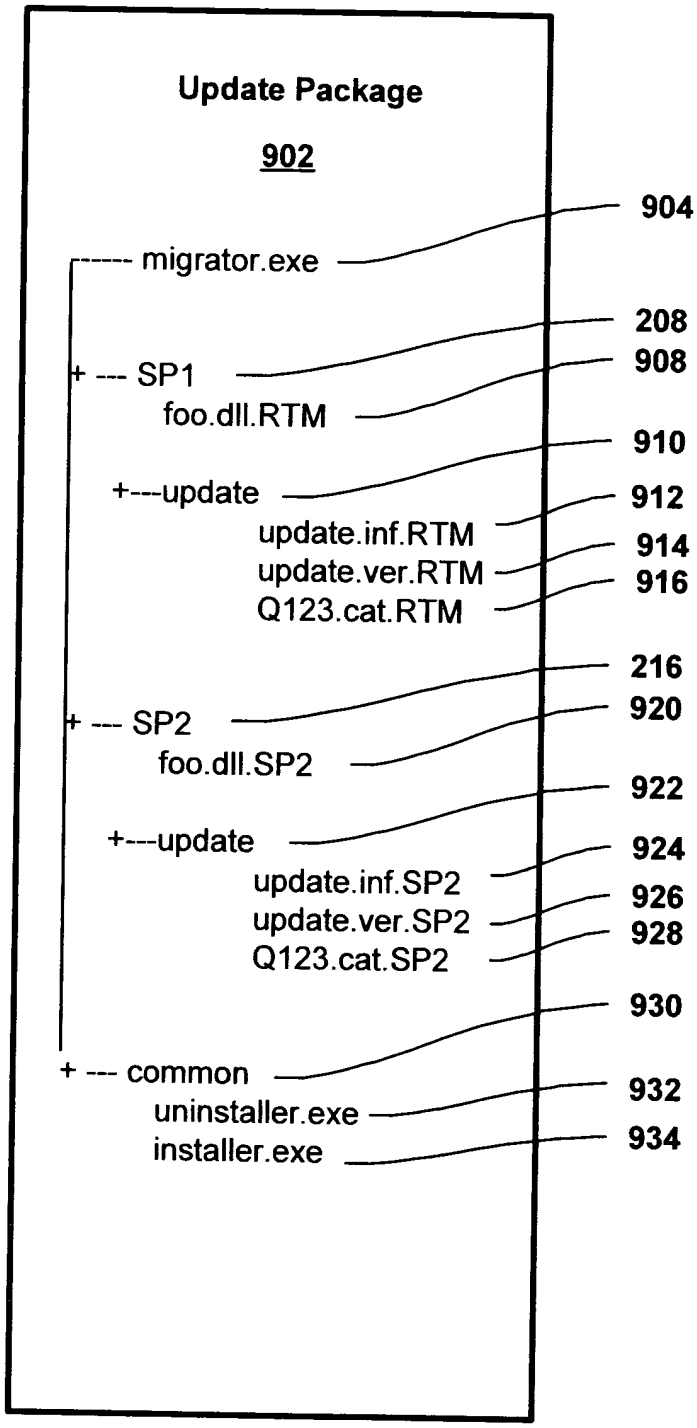
Update Package
902
904
migrator.exe
208
+ --- SP1
908
foo.dll.RTM
910
+---update
912
update.inf.RTM
914
update.ver.RTM
916
Q123.cat.RTM
216
+ --- SP2
920
foo.dll.SP2
922
+---update
924
update.inf.SP2
926
update.ver.SP2
928
Q123.cat.SP2
930
+ --- common
932
uninstaller.exe
934
installer.exe

FIG. 9

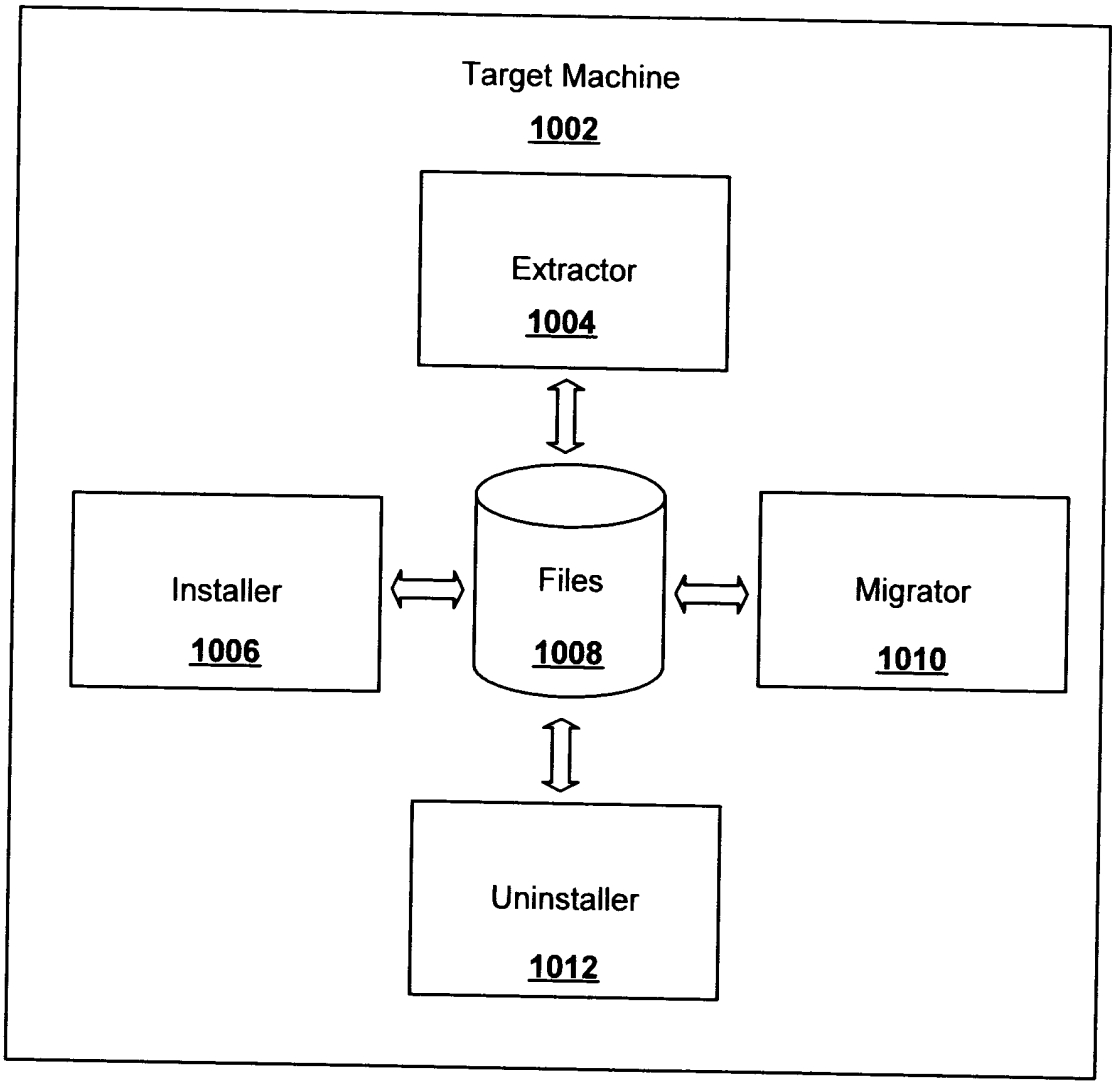
Target Machine
1002
Extractor
1004
Installer
1006
Files
1008
Migrator
1010
Uninstaller
1012

FIG. 10

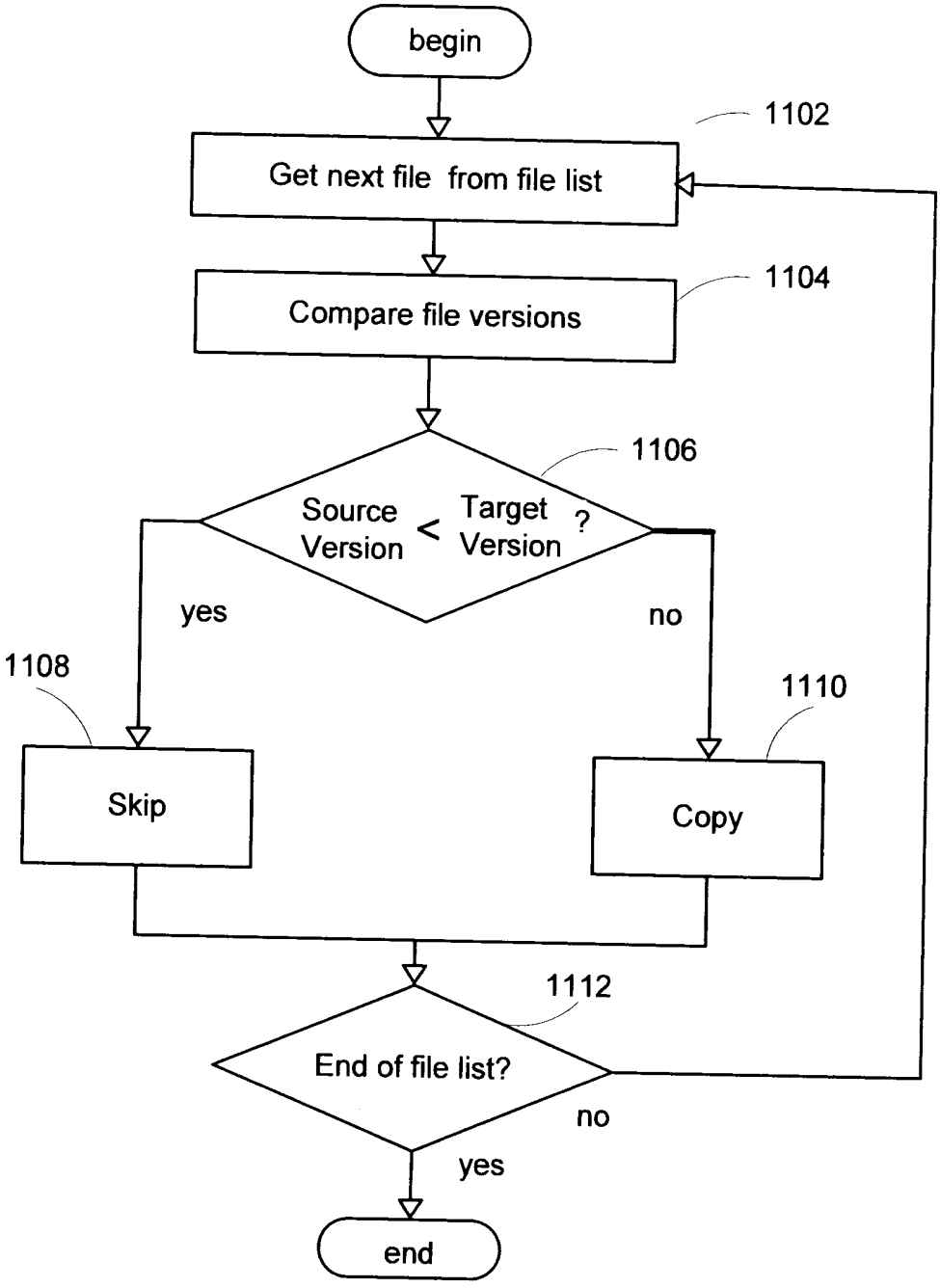
begin
1102
Get next file from file list
Compare file versions
1104
1106
Source Version < Target Version ?
yes
no
1108
1110
Skip
Copy
1112
End of file list?
no
yes
end

FIG. 11